12/7/89-00272

DEPARTMENT OF THE NAVY

ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORFOLK, VIRGINIA 23511-6287

TELEPHONE NO. (804) 445-4385
IN REPLY REFER TO

5090
1822:KHW
7 DEC 1989

Geroud J. McCoy
Technical Services Chief
Virginia State Clean Up Program
Commonwealth of Virginia
Department of Waste Management
11th Floor, Monroe Building
101 N. 14th Street
Richmond, Virginia 23219

Gentlemen:

As discussed during your telephone conversation with Mr. Ken Walker of our Installation Restoration Program (IRP) staff on November 15, 1989 we have reviewed the state's comments pertaining to our submittal of the Remedial Investigation/Feasibility Study and remedial action plans for the demolition of Building V60-V90 at the Naval Aviation Depot, Naval Air Station, Norfolk, Virginia. Our response is as follows:

The Navy acknowledges that stockpiling of hazardous waste is prohibited per Virginia Hazardous Waste Management Regulations (VHWMR). The current Remedial Action Plan does not permit stockpiling of hazardous waste.

Water runoff from the building interior is not permitted during the remedial action required prior to demolition. The soils have not been found to contain hazardous waste. If during remedial actions a condition exists where hazardous materials have evaded the sampling strategy of the RI/FS, then a modification to the contract will be provided. Contingency plans for these types of events are considered part of the contractor work plan and will be administered accordingly.

Leachability of the concentrations of As and Pb were conducted at the site and results as shown on table 4-13, page 106 of the RI/FS Volume I verify that the levels are not considered a health hazard according to the state and federal regulations. The Navy believes adequate soil sampling to verify soil contaminant levels has been conducted.

Attachment 3

TCE is not considered to have been generated from aircraft maintenance operations. Follow on sampling has not confirmed the presence of TCE as noted in Table 4-14 page 107 of the RI/FS Volume 1. Thus sample results do not indicate that the soil will require remediation.

Remedial Action Plan

The Navy concurs with your comments regarding proper disposal practices. The remedial design precludes violation of any state or federal regulations.

Wastewaters resulting from scarifying/powerwashing will be collected and analyzed for both PCB and Dioxin content. Proper disposal and transport will strictly be adhered to.

Disposal of materials will follow the Virginia Department of Solid Waste Management Regulations (SWMR) Part VIII 8.2B referring to concentrations of PCBs. Additionally the remedial design includes the remedial action to adhere to the Virginia Hazardous Waste Management Regulations (VHWMR).

The contractor will incorporate the clarifications in the RI/FS with respect to 2,3,7,8, TCDD, and equivalents.

The Contractors Health and Safety Plan will be forwarded to your office when the submittal is received.

As stated in your letter of August 31, 1989 the plans for remediating this site appear to properly address all federal and state regulations. The proposed remedial design adheres to CERCLA guidance and appears to be acceptable for implementation. With this, the Navy has awarded a contract to provide remedial action for this plan.

Accordingly, we will recommend that the Record of Decision be signed and thus allow the contractor to conduct the Remedial Action under these plans. Currently, the Remedial Action Work will begin on January 1, 1990.

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If you have any questions or require additional information prior to work being conducted, please contact Mr. Ken Walker at (804) 445-4385.

Sincerely,

R. D. CROWSON, P.E.
Director, Environmental Quality Division
By direction of the Commander

Copy to:
COMNAVBASE Norfolk
NAVAVNDEPOT Norfolk
NAS Norfolk
United States Environmental Protection Agency
Region III
Federal Agency Compliance Section (3ES41)
ATTN: Drew Lausch, Hydrogeologist
841 Chestnut Building
Philadelphia, Pennsylvania 19107

RECORD OF DECISION
REMEDIAL ALTERNATIVE SELECTION

Site: V-60/V-90 Building Complex
Naval Aviation Depot
Norfolk, Virginia

Data Reviewed:

The underlying technical information, unless otherwise specified, used for analysis of cost-effectiveness and feasibility of remedial alternatives is included in the following documents. I have been briefed of their contents, and they form the principal basis for my decision of the appropriate extent of remedial action.

- Versar, Inc., 1989. Environmental Investigation and Remedial Action Plans for the Demolition of Buildings V-60/V-90, Naval Aviation Depot, Norfolk, Virginia. March. Revised August 1989, Springfield, Virginia.
- Versar, Inc., 1989. Draft Remedial Investigation/Feasibility Study Report for Buildings V-60 and V-90, Naval Aviation Depot, Norfolk, Virginia. Volume I-Remedial Investigation Report. August 1989. Springfield, Virginia.
- Versar, Inc., 1989. Draft Remedial Investigation/Feasibility Study Report for Buildings V-60 and V-90, Naval Aviation Depot, Norfolk, Virginia. Volume II-Feasibility Study Report. August 1989. Springfield, Virginia.
- Versar, Inc., 1989. Draft Remedial Action Plan for Buildings V-60 and V-90, Naval Aviation Depot, Norfolk, Virginia. August 1989. Springfield, Virginia.
- USN 1989. Specifications for Demolition of Buildings V-60 and V-90, Naval Aviation Depot, Norfolk, Virginia. Atlantic Division. Naval Facilities Engineering Command. Norfolk, Virginia. May 1989.

Description of the Selected Remedy

The selected remedy is to, in general, incorporate selective cleaning and demolition of specified contaminants listed below, followed by the demolition of the V-60/V-90 structure. After the removal of the demolition rubble, the site will be backfilled to above grade and seeded. The selected remedy is also to incorporate protection to the workers, general population, and the environment through engineering controls to prevent/minimize the release of these contaminants through air, water, and soil migration, and bodily exposure. A summary of the selected remedy is discussed below for the following contaminants found at the V-60/V-90 site: PCBs, PCDD's/PCDF's, beryllium, radium-226 (for building structures and soils), asbestos, transformers, and miscellaneous waste. See Figure 1 for contaminated work area references.

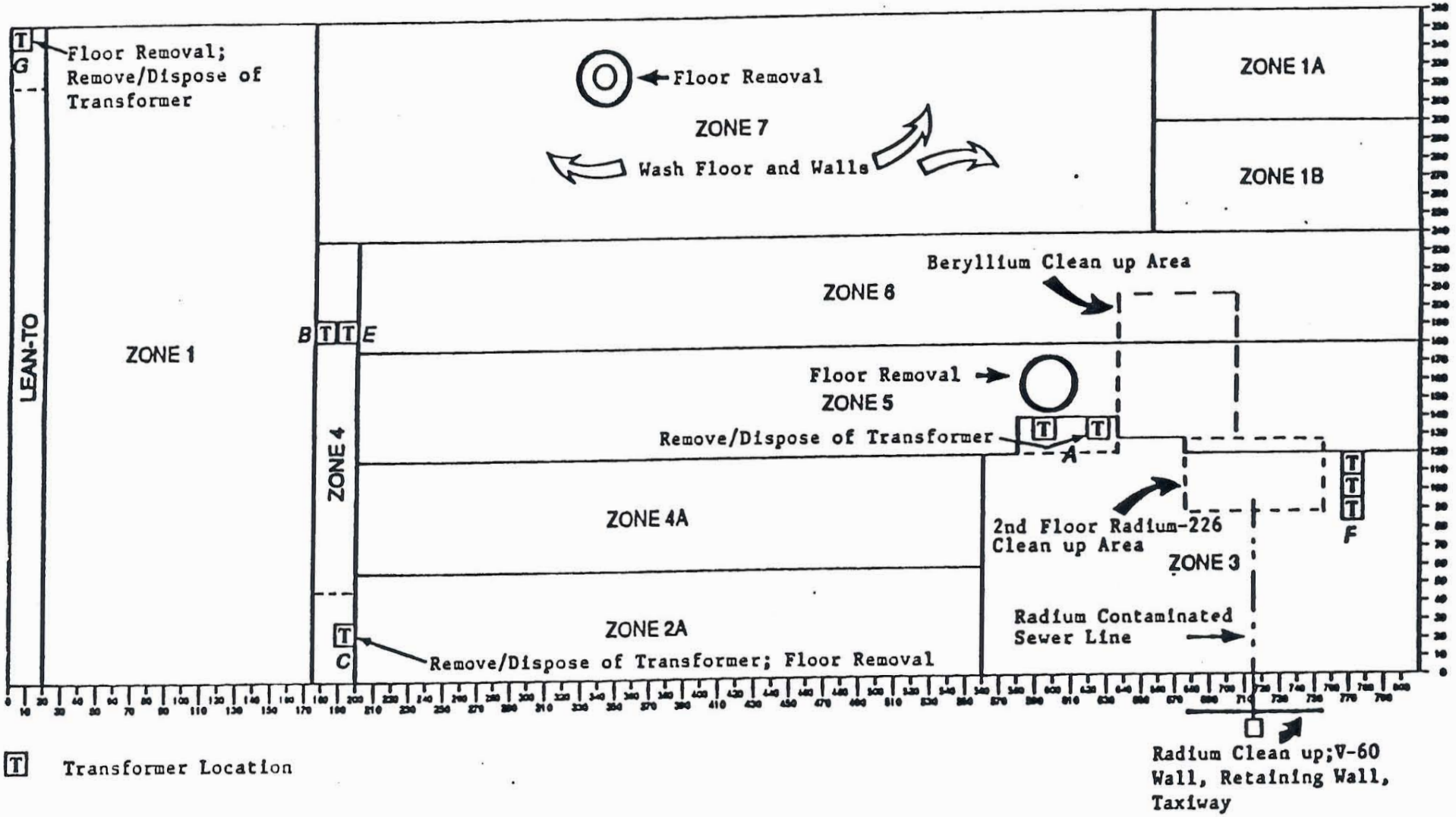
PCB Contamination

The PCB contamination in the V-60/V-90 buildings is to be remediated by either selective building demolition or washing. The remediation action is contingent to the amount of PCB contamination above the criteria of 10 ppm for bulk material and 1,000 $\mu g/m^2$ for surfaces. To meet this criteria, the floor is to be removed in transformer vaults C and G, a section in Zone 5, and part of Zone 7 near the transformer site. Also, washing is to be performed to the walls and floor in the remaining area of Zone 7. The PCB-contaminated materials are to be properly containerized, transported and disposed of in accordance with current regulatory requirements (i.e., chemical landfill and/or incineration).

PCDD/PCDF Contamination

The PCDD/PCDF contamination is associated with the PCB contamination and is to be treated by the same PCB remediation activities. The PCDD/PCDF remediation action is contingent to the amount of PCDD/PCDF surface contamination above the building surface cleaning criteria of

FIGURE 1
V-60/V-90 Floor Plan



T Transformer Location

General Notes:

1. Asbestos-containing materials are located extensively throughout the V-60/V-90 complex and are to be removed.
2. Miscellaneous chemicals are located throughout the V-60/V-90 complex and are to be relocated to the lean-to, sorted, characterized, packaged, and removed.

1 ng/m^2 TCDD equivilent. To meet this criteria and the associated PCB remediation criteria, the floor is to be removed in transformer vaults C and G, part of Zone 5, and part of Zone 7, and washing is to be performed to the walls and floor in the remaining area of Zone 7.

Beryllium Dust Contamination

The beryllium dust contamination within the former landing gear maintenance areas, specifically the beryllium grinding room, the phosphoric acid/Zyglo room, the wash room, and the locker room, is to be remediated by washing. The beryllium dust contamination is to be removed to meet the building surface cleaning criteria of 50 $\mu g/m^2$. The beryllium-contaminated waste material is to be properly containerized, transported, and disposed of in accordance with current regulatory requirements (i.e., chemical landfill).

Radium-226 Contamination

The radium-226 contamination within isolated areas associated with former instrument repair operations, in the second floor of V-60 in a sewage drain, and selected exterior locations and soil is to be remediated by removal using selective demolition and excavation. The Radium-226 contaminated materials are to be removed until the cleanup criteria or its equivalent below are met:

Radioactive Decay Product	Average (over Area >1m^2)	Maximum (over Any 100 cm^2 area)
(A) Fixed alpha and beta	100 dpm/100cm^2	300 dpm/10 cm^2
(B) Removable alpha	20 dpm/100cm^2	20 dpm/100 cm^2
(C) Total gamma	20 μR/hr	20 μR/hr

The radium-contaminated materials are to be properly containerized, transported, and disposed of in accordance with current regulatory requirements (i.e., radioactive waste landfill).

Asbestos-Containing Materials

The asbestos-containing materials (ACM) located extensively within the V-60/V-90 buildings and outside of these buildings are to be remediated by removal. The ACM include nonfriable mastic and roofing materials as well as pipe/elbow insulation, floor tile, lab hood insulation, autoclave insulation, asbestos curtains, and transite paneling. All of these ACM are to be removed, containerized, transported, and disposed of in a sanitary landfill that is licensed to accept asbestos waste.

PCB/PCB-Contaminated Transformers

The three PCB/PCB-contaminated transformers are to be remediated by removal in accordance with Federal Regulation 40 CFR 761. This remediation is to include draining, solvent cleaning, and disposal/ incineration at a licensed facility.

Miscellaneous Chemicals

The miscellaneous chemicals in the V-60/V-90 complex are to be remediated by removal. The chemicals are to be relocated to the lean-to shed at the west side of Building V-90 where they are to be sorted, characterized, packaged, and disposed of in accordance with applicable federal regulations.

Declarations

The approved remediations described above meet or exceed the criteria of overall protection of human health and the environment, applicable or relevant and appropriate requirements (ARARs), effectiveness, implementability, and cost. These remediations are consistent with the Navy Installation Restoration Program (NEESA 20.2-047B), the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) and subsequent amendments, and the National Contingency

Plan (40 CFR Part 300). These remediations are consistent with the current design specifications for remediating the V-60/V-90 complex, and in some instances the design specifications exceed the environmental requirements. Included as approved actions are the environmental control, worker protection and quality control requirements as set forth in some design specifications and the remedies described within this Record of Decision.

_____ Date

_____
RADM Kenneth L. Carlsen, USN
Commander, Naval Base
Norfolk, Virginia

_____ Date

_____
CAPT Garland Skinner, USN
Commander, Naval Aviation Depot
Naval Air Station
Norfolk, Virginia

_____ Date

_____
CAPT Barton Gohmann, USN
Commander, Naval Air Station
Norfolk, Virginia